

of the range bar, followed by the vehicle's total driving distance before running out of fuel, as described in § 600.311. Adjust the scale and length of the range bar if the specifications in this paragraph (a)(5) do not work for your vehicle. Include a left-justified heading above the range bar with the expression: "Driving Range". For vehicles that use combined power from the battery and the engine before the battery is fully discharged, add the following statement below the range bar described in this paragraph (b)(4): "All electric range = x miles"; complete the expression by identifying the appropriate value for driving range starting from a full battery before the engine starts as described in § 600.311.

(c) Include the following statement instead of the one identified in § 600.302-12(c)(5): "This vehicle emits x grams CO<sub>2</sub> per mile. The best emits 0 grams per mile (tailpipe only). Producing and distributing fuel and electricity also create emissions; learn more at fueleconomy.gov." For x, insert the vehicle's composite CO<sub>2</sub> emission rate as described in § 600.311.

[76 FR 39562, July 6, 2011]

**§ 600.310-12 Fuel economy label format requirements—electric vehicles.**

Fuel economy labels for electric vehicles must meet the specifications described in § 600.302, with the following modifications:

(a) Include the following statement instead of the statement specified in § 600.302-12(b)(4): "Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets a MPG and costs \$b to fuel over 5 years. Cost estimates are based on c miles per year at \$d per kW-hr. Vehicle emissions are a significant cause of global warming and smog." For a, b, c, and d, insert the appropriate values established by EPA.

(b) Include the following elements instead of the information identified in § 600.302-12(c)(1):

(1) The heading "Fuel Economy" near the top left corner of the field.

(2) The combined fuel economy value as determined in § 600.311 below the

heading. Include the expression "combined city/hwy" below this number.

(3) An electric plug logo to the left of the combined fuel economy value.

(4) The units identifier and specific fuel economy values to the right of the combined fuel economy value as follows:

(i) Include the term "MPGe" in the upper portion of the designated space.

(ii) Include the city fuel economy value determined in § 600.311 in the lower left portion of the designated space. Include the expression "city" below this number.

(iii) Include the highway fuel economy value determined in § 600.311 in the lower right portion of the designated space. Include the expression "highway" below this number.

(5) The fuel consumption rate determined in § 600.311, to the right of the fuel economy information. Include the expression "kW-hrs per 100 miles" below the numerical value.

(6) The sub-heading "Driving Range" below the combined fuel economy value. Below this sub-heading, insert a horizontal range bar nominally 80 mm long to show how far the vehicle can drive when fully fueled. Include a vehicle logo at the right end of the range bar. Include the following left-justified expression inside the range bar: "When fully charged, vehicle can travel about \* \* \*". Below the right end of the range bar, include the expression "x miles"; complete the expression by identifying the appropriate value for total driving range from § 600.311. Include numbers below the bar showing the scale, with numbers starting at 0 and increasing in equal increments. Use good engineering judgment to divide the range bar into four, five, or six increments.

(7) Below the driving range information, the expression "Charge Time: x hours (240V)", where x is the time to charge the battery as specified in § 600.311. Change the specified voltage if appropriate as specified in § 600.311.

(c) Include the following statement instead of the one identified in § 600.302-12(c)(5): "This vehicle emits x grams CO<sub>2</sub> per mile. The best emits 0 grams per mile (tailpipe only). Does not include emissions from generating electricity; learn more at

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fuelconomy.gov.” For *x*, insert the vehicle’s composite CO<sub>2</sub> emission rate as described in § 600.311.

[76 FR 39563, July 6, 2011]

### § 600.311-08 Range of fuel economy for comparable automobiles.

(a) The Administrator will determine the range of combined fuel economy values for each class of comparable automobiles comprising the maximum and minimum combined fuel economy values for all general labels as determined in § 600.210-08(c).

(b)(1) The ranges for a model year will be made available on a date specified by the Administrator that closely coincides to the date of the general model introduction for the industry.

(2) If the Administrator has not made available the fuel economy ranges prior to the model introduction, the ranges from the previous model year must be used.

(3) For 2008 model year automobiles manufactured or imported prior to the date specified in § 600.306-08(b), the Administrator will provide initial fuel economy ranges based upon data from 2007 models that have been adjusted in accordance with the derived 5-cycle calculations in § 600.210-08.

(c) If the Administrator determines that automobiles intended for sale in California are likely to exhibit significant differences in fuel economy from those intended for sale in other states, he/she will compute separate ranges of fuel economy values for each class of automobiles for California and for the other states.

(d) For high altitude vehicles determined under § 600.310, both general and specific labels will contain the range of comparable fuel economy computed in this section.

(e) The manufacturer shall include the appropriate range of fuel economy determined by the Administrator in paragraph (b) of this section, on each label affixed to an automobile within the class, except as provided in § 600.306(b)(1).

[71 FR 77951, Dec. 27, 2006]

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### § 600.311-12 Determination of values for fuel economy labels.

(a) *Fuel economy.* Determine city and highway fuel economy values as described in § 600.210-12(a) and (b). Determine combined fuel economy values as described in § 600.210-12(c). Note that the label for plug-in hybrid electric vehicles requires separate values for combined fuel economy for vehicle operation before and after the vehicle’s battery is fully discharged; we generally refer to these modes as “Blended Electric+Gas” (or “Electric Only”, as applicable) and “Gas only”.

(b) *CO<sub>2</sub> emission rate.* Determine the engine-related CO<sub>2</sub> emission rate as described in § 600.210-12(d).

(c) *Fuel consumption rate.* Calculate the fuel consumption rate as follows:

(1) For vehicles with engines that are not plug-in hybrid electric vehicles, calculate the fuel consumption rate in gallons per 100 miles (or gasoline gallon equivalent per 100 miles for fuels other than gasoline or diesel fuel) with the following formula, rounded to the first decimal place:

Fuel Consumption Rate = 100/MPG

Where:

MPG = The unrounded value for combined fuel economy from § 600.210-12(c).

(2) For plug-in hybrid electric vehicles, calculate two separate fuel consumption rates as follows:

(i) Calculate the fuel consumption rate based on engine operation after the battery is fully discharged as described in paragraph (c)(1) of this section.

(ii) Calculate the fuel consumption rate during operation before the battery is fully discharged in kW-hours per 100 miles as described in SAE J1711 (incorporated by reference in § 600.011), as described in § 600.116.

(3) For electric vehicles, calculate the fuel consumption rate in kW-hours per 100 miles with the following formula, rounded to the nearest whole number:

Fuel Consumption Rate = 100/MPG

Where:

MPG = The combined fuel economy value from paragraph (a) of this section, in miles per kW-hour.